

Using Infoprint Manager with the Infoprint Color 130 Plus

The Infoprint Color 130 Plus is a high-speed, high quality, full-color digital printer that you can submit jobs to through Infoprint Manager. Significant processing demands are placed on the Infoprint Manager system when it is preparing and sending print jobs to an Infoprint Color 130 Plus. Therefore, you should dedicate one AIX server entirely to your Infoprint Color 130 Plus; this system should only contain one Infoprint Manager server, and it should only send print jobs to one Infoprint Color 130 Plus.

System requirements

To submit jobs to an Infoprint Color 130 Plus through Infoprint Manager (without using the color PostScript transform), your system must meet the following requirements.

- Dedicated Gigabit Ethernet connection
- F80 AIX system with:
 - Two CPUs (450 Mhz)
 - Two GB RAM
 - Four 18 GB Serial Storage Architecture (SSA)
 - Two 18 GB SCSI hard drives

If you plan to use the PostScript color transform, your system must meet the following requirements.

- Dedicated Gigabit Ethernet connection
- F80 AIX system with:
 - Two 450 Mhz CPUs and four 500 Mhz CPUs
 - Six GB RAM
 - Six 18 GB Serial Storage Architecture (SSA)
 - Two 18 GB SCSI hard drives

Defining the Infoprint Color 130 Plus to Infoprint Manager

Important: Because you are dedicating an Infoprint Manager server to your Infoprint Color 130 Plus, this procedure assumes that you have either just installed Infoprint Manager on this system or that you have created a new server on this machine. In either case, your Infoprint Manager server would not contain any objects (logical destinations, queues, or actual destinations) yet. If you are planning to use an existing Infoprint Manager server to send jobs to your Infoprint Color 130 Plus, you should delete all of the objects that currently exist in it before you start this procedure.

When you define your Infoprint Color 130 Plus to Infoprint Manager, you must define it as a **PSF TCP/IP-attached** printer. You can create the printer either from the AIX command line using the **pdcreate** command or from the Infoprint Manager Administration GUI using the **Create Printer Wizard**. Follow this procedure to define the printer using the GUI.

1. Start the Infoprint Manager Administration GUI.

2. Select **Printer** -> **Create** -> **PSF** -> **TCP/IP**.
3. In the first panel of the Create Printer Wizard, do the following.
 - a. Type a name for the printer in the **Name** field.
 - b. Verify that the server is correct in the **Server** field.
 - c. Select **InfoprintColor130Plus** from the **Model** drop-down list.

Note: If that model is not shown, you must update Infoprint Manager to the current service level.

- d. Type the TCP/IP address and port number for the printer in the correct fields.
- e. Click **Next**.
4. In the second panel, type a name for the logical destination that will send jobs to this printer and click **Next**.
5. In the third panel, type a name for the queue that will submit jobs to the this destination and click **Next**.
6. On the rest of the panels, accept the default values that Infoprint Manager sets for AFP color printing by clicking **Next** and finally **Finish**.

Configuring the PSF TCP/IP printer in Infoprint Manager

Once you have created the printer in Infoprint Manager, you must do several other things before you can print. Complete the following procedures in any order. Instructions appear below.

- “Verifying the size and location of the Input Manager workspace”
- “Setting the **delete-segment-list** attribute on the default job” on page 3
- “Identifying where to store AFP resources” on page 3
- “Starting the color rasterized image processor (RIP) on this server” on page 4
- “Changing the color rendering value” on page 5

Once you have completed these steps, refer to *Printing Scenarios for Infoprint Manager with the Infoprint Color 130 Plus* (available from the IBM Printing Systems website at <http://www.ibm.com/printers>) for additional information on sending print jobs to the Infoprint Color 130 Plus. To find the publication, from the Printing Systems home page under **Resources for**, click **Infoprint Manager**, then click **Infoprint Manager for AIX** and select **3.2 Product Library**.

Verifying the size and location of the Input Manager workspace

The Input Manager is the part of Infoprint Manager that breaks print jobs into segments to allow greater flexibility during processing. The Input Manager stores job segments in its workspace. Segments remain in the workspace either until they are manually deleted or the workspace fills up, depending on how you choose to manage the workspace. By default, the Input Manager workspace is located at `/var/psf/segments`.

Because of the size and complexity of the color print jobs you send to your Infoprint Color 130 Plus, the Input Manager workspace must have at least 18 GB of disk space available and it should be a separate filesystem. If the existing `/var/psf/segments` does not have that much disk space available, the easiest thing to do is to create a new filesystem and mount it over `/var/psf/segments`. None of the Infoprint Manager settings need to be changed.

Note: Make sure that the new filesystem is set to mount automatically at system reboot so that it will still be available if you have to reboot your system.

If you do not want to overmount the filesystem, you can create a new filesystem and mount it on a different mount point. In this case, you must change the Input Manager settings to point to the correct location. To change the Input Manager settings, do the following.

1. At an AIX command prompt, type:
`smitty pd_psf_com_adm_inp`
2. Change the **PATH used for work area & percent usage threshold** to point to the new filesystem you created.
3. Confirm the changes and exit SMIT.

Setting the delete-segment-list attribute on the default job

When the Input Manager breaks a print job into segments, it creates a file called a *segment list*. The segment list is used to make sure the job is reassembled in the correct order, to track job progress, and to perform other job management functions. Segment lists are stored in `/var/psf/seglist`, and can either be saved or deleted when a job is finished printing. To help your Infoprint Manager system use processing space effectively, set the **delete-segment-list** attribute on the default job for your Infoprint Color 130 Plus system to **Yes**. By setting this attribute on the default job, it will be applied to all of the jobs that are printed through this logical destination.

You can set this attribute either from the AIX command line using the **pdset** command or in the Infoprint Manager Administration GUI. Follow this procedure to set the attribute using the GUI.

1. Start the Infoprint Manager Administration GUI.
2. Right-click the printer you created for your Infoprint Color 130 Plus and select **Job and Document Defaults** -> **Modify** from the pop-up menu.
3. In the **Job and Document Defaults** properties notebook, click the **Job Other** tab.

Note: If you do not see the **Job Other** tab, click **Show More**.

4. Find the **Delete segment list** field and select **Yes**.
5. Click **OK**.

Identifying where to store AFP resources

There are various kinds of AFP resources, such as form definitions, page definitions, overlays, and fonts. The newest kind of AFP resource is the *data object*. Like other resources, data object resources are files that you can include in AFP documents. Data object resources can be EPS, PDF, and IOCA files. In addition, if you use the transforms that come with Infoprint Manager to convert TIF, GIF, and JPEG images into AFP first, they can be used as data object resources as well.

In Infoprint Manager, data object resources are grouped with BCOCA and GOCA objects, and all of those types of files are called *presentation object containers*. As with other kinds of AFP resources, you must tell Infoprint Manager where your presentation object containers are located.

You can define where your image resources are stored either from the AIX command line using the **pdset** command with the **resource-context-presentation-object-container** attribute or using the Infoprint Manager Administration GUI.

Follow this procedure to set the attribute using the GUI.

1. Start the Infoprint Manager Administration GUI.
2. Select **Options** → **Customize**.
3. In the **Customize** dialog, click the **Printer** tab.
4. In the **Action** column, find **Change AFP Resources** and select the check box in the **Menu** column next to it.

This step adds this task to the **Printer** menu. If you want to add other tasks to the Printer menu or to any other menu, you can do it now or you can wait until later.

5. Click **OK** to apply the settings and close the dialog.
6. Select the printer that you created in “Defining the Infoprint Color 130 Plus to Infoprint Manager” on page 1.
7. Select **Printer** → **AFP Resources** to open the **Change AFP Resources** dialog.
8. In the **Location of presentation object containers** field, type the path where your presentation object containers are stored. If they are stored in more than one location, list all of the paths separated with colons (:), for example:
/resources/containers:/dept123/pres-obj-containers:/dept456/pres-obj-containers
9. Fill in any other fields that are appropriate. For example, if you use form definitions, fill in the **Location of form definitions** field.
10. Click **OK** to apply the settings and close the dialog.

Starting the color rasterized image processor (RIP) on this server

Important: You only need to perform this step if you will be submitting color PostScript print jobs to your Infoprint Color 130 Plus.

The RIP generates the data stream that Infoprint Manager sends to the printer. By default, Infoprint Manager uses a RIP that produces monochrome (black and white) documents. Therefore, you must install and start the color RIP before you send color documents to your Infoprint Color 130 Plus. You only have to start the RIP once.

To start the color RIP, type the following at a command prompt:

```
install.color
```

and press **Enter**. When the install.color script is finished, you will see the message:

```
The color Postscript config files have been activated.
```

If you ever want to send monochrome print jobs to your Infoprint Color 130 Plus, you can stop the color RIP and start the monochrome RIP by typing the following at a command prompt:

```
install.mono
```

and press **Enter**. When the install.mono script is finished, you will see the message:

```
The monochrome Postscript config files have been activated.
```

Be sure to start the color RIP again before you resume printing color jobs.

Changing the color rendering value

While the Infoprint Color 130 Plus produces vibrant full-color images, including images that contain gradients and shading, it is not able to reproduce every shade of every color. The *color rendering intent* value (**color-rendering-intent** attribute) determines what Infoprint Manager does when it encounters a shade in a PostScript image that the Infoprint Color 130 Plus cannot reproduce exactly.

There are two possible values for color rendering intent:

Relative

When Infoprint Manager encounters a color that Infoprint Color 130 Plus cannot reproduce, it substitutes the closest color value that it *can* reproduce.

Perceptual

When Infoprint Manager encounters a color that Infoprint Color 130 Plus cannot reproduce, it adjusts all of the colors in the image so that they maintain their color relationships to each other. The result is an image that is pleasing to the eye, but that may not look exactly like the original image.

The default value is **Relative**.

You can set the *color rendering intent* value on a print job, a default document, or on an actual destination using either the command line or the Infoprint Manager Administration GUI. Follow this procedure to set the attribute using the GUI.

1. Start the Infoprint Manager Administration GUI.
2. If you have not already customized the GUI to add the **Change AFP Color** task to the **Printer**, **Printer -> Job and Document Defaults**, **Job**, and **Logical -> Job and Document Defaults** menus, do the following:
 - a. Select **Options -> Customize**.
 - b. In the **Customize** dialog, click the **Printer** tab.
 - c. In the **Action** column, find **Change AFP Color** and **Job and Document Defaults Change AFP Color** and select the check box in the **Menu** column next to it.
 - d. Repeat on the **Job** and **Logical** tabs.
 - e. Click **OK** to apply the settings and close the dialog.
3. Select the object that you want to set the *color rendering intent* value for by clicking it once.
4. Use the menu items you added in 2 to open the appropriate **Change AFP Color** dialog:
 - For an actual destination, select **Printer -> Change AFP Color**.
 - For a default job on an actual destination, select **Printer -> Job and Document Defaults -> Change AFP Color**.
 - For a default job on a logical destination, select **Logical -> Job and Document Defaults -> Change AFP Color**.
 - for a job that has already been submitted, select **Job -> Change AFP Color**.
5. In the **Change AFP Color** dialog, find the **Color rendering intent** field, select a value from the drop-down list, and click **OK**.

Specifying the color rendering intent value on the other-transform-options attribute

The attribute **other-transform-options** can now have a value which includes an equals sign, so **pragma** statements are supported. For example, to submit a color print job called PS.doc to a printer called color_printer using perceptual color rendering, you could type the following on the command line:

```
pdpr -d color_printer -x "other-transform-options = -pragma  
color-rendering-intent=perceptual" PS.doc
```

This pragma can also be used on a command line invocation of a transform or it can be specified in the transform configuration file.